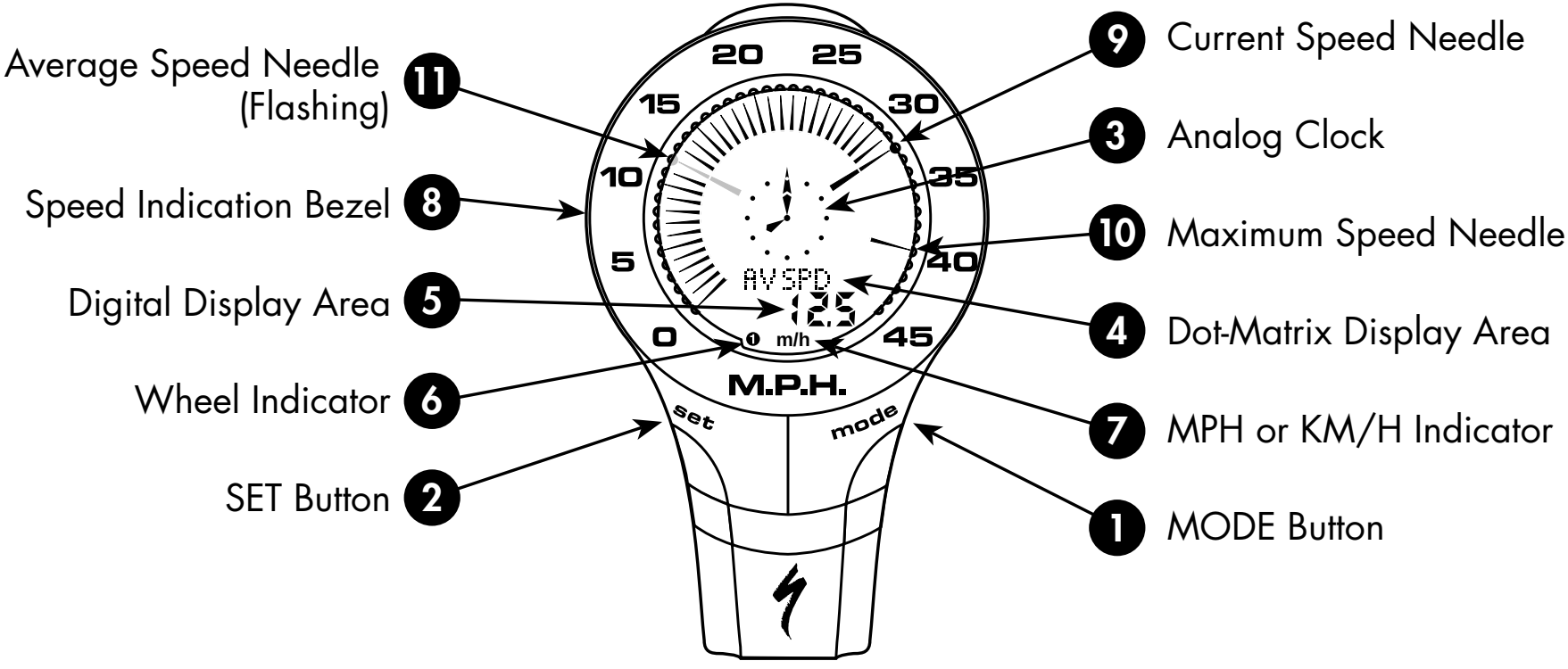
SPEEDZONE SPORT CYCLOCOMPUTER

Congratulations on your purchase! You are now the owner of the world's finest cyclocomputer. Your Specialized® SpeedZone® Sport features a revolutionary new display screen that allows you to view five functions simultaneously. Additionally, it has been designed to provide the best combination of performance, features, durability and ease of use.

This illustration describes the screen display and buttons:



The following functions are available on your SpeedZone Comp:

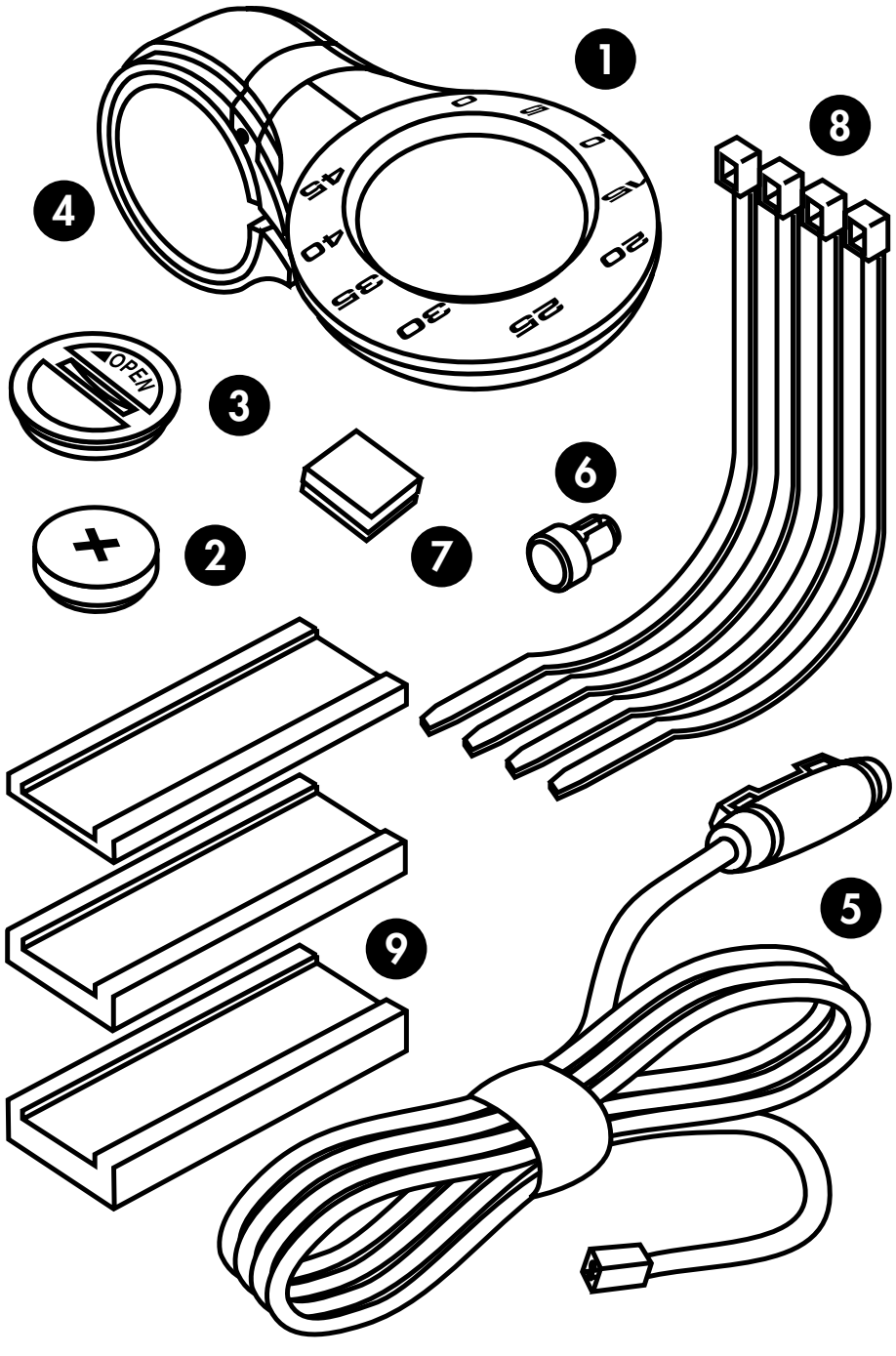
- SPEED – Current Speed
- AVSPD – Average speed
- MXSPD – Maximum Speed
- ODO – Odometer (total distance)
- TRIP – Trip Distance
- ATM – Automatic Start/Timer
- Digital 12/24 Hour Clock
- Analog Clock

This computer also features:

- Five function LCD Display
- Easy Calibration Mode
- Heavy-duty abrasion resistant pick-up wire
- Water resistant housing
- 1 Year Warranty

What is included in your SpeedZone Sport package:

1. SpeedZone Computer (1)
2. SpeedZone CR-2032 Lithium Battery (1)
3. SpeedZone Battery Door
4. Mounting bracket (1)
5. Speed Sensor Wire
6. Magnet with screw (1)
7. Adhesive backed magnet (1)
8. Cable tie wraps (4)
9. Mounting bracket sizing straps (3)



BATTERY INSTALLATION AND REPLACEMENT

Before using your SpeedZone Sport Computer you will need to install the battery. Turn the computer over so the display is facing downward. Use a coin to unthread the battery cap from the computer. Install the battery (model CR2032, Specialized P/N 481-3004) with the positive pole (+) facing upward. Carefully thread the battery cap back onto the case with a coin. *(See Figure 3)* If, after battery replacement, the LCD display is blank or shows incomplete digits, turn the computer over and press the "AC" button on the bottom of the case with the tip of a pen or a paper clip. This will clear all the data and re-start the computer. If you need to replace the

battery, make a note of your odometer reading and wheel circumference settings before removing it. You can then re-enter the data when you restart the computer.

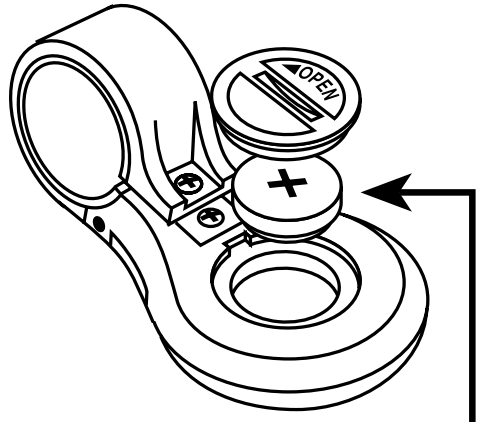


FIGURE 3.

MOUNTING THE SPEEDZONE SPORT

The SpeedZone Sport sensor can mount on the right or the left side of the fork blade. Use the cable tie-wraps provided to position the sensor. Do not tighten until the final placement of the sensor magnet is correct. *(See figure 4)*. Wheel magnets have been provided for both traditional round spokes and bladed (flat) aerodynamic spokes.

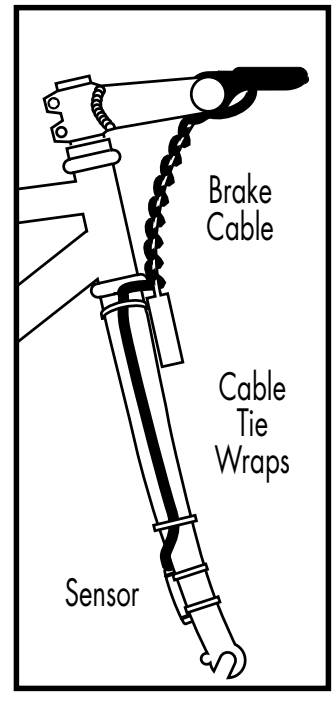


FIGURE 4. SENSOR PLACEMENT

For wheels with round spokes:
Attach the magnet to a spoke across from the transmitter with the magnet screw. The clearance between the magnet and the transmitter should be approximately 1/32"-1/16" (1-2mm). Tighten the magnet and transmitter. Do not over-tighten the magnet screw. *(See figure 5)*.

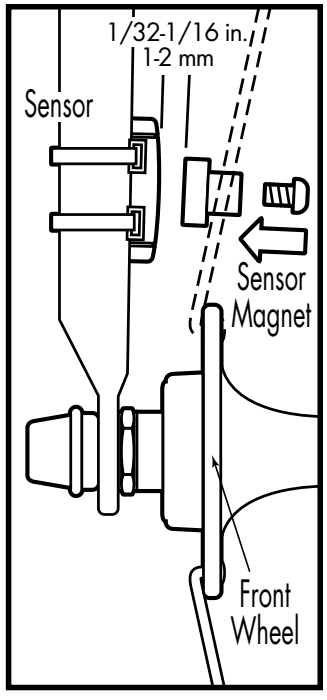


FIGURE 5. MAGNET PLACEMENT

For wheels with bladed spokes: Use some isopropyl (rubbing) alcohol or a mild detergent to thoroughly clean the spoke that you plan to attach the magnet to. Remove the backing from the adhesive tape and firmly press the magnet onto spoke. The tape uses a special pressure sensitive adhesive. To ensure a strong bond, please wait at least 12 hours for the adhesive to cure before riding your bicycle.

Your SpeedZone Sport comes preconfigured with a strap to fit standard road and mountain bike handlebars. Attach the mount to the handlebar using the Philips head screw provided. Tighten so that the bracket cannot rotate on the handlebar. There are several sizing shims provided to fit different diameter bars. If you are using the new 31.8mm diameter bars, you will need to purchase the 31.8mm Handlebar Mount Kit (Specialized P/N 4812-3100) from

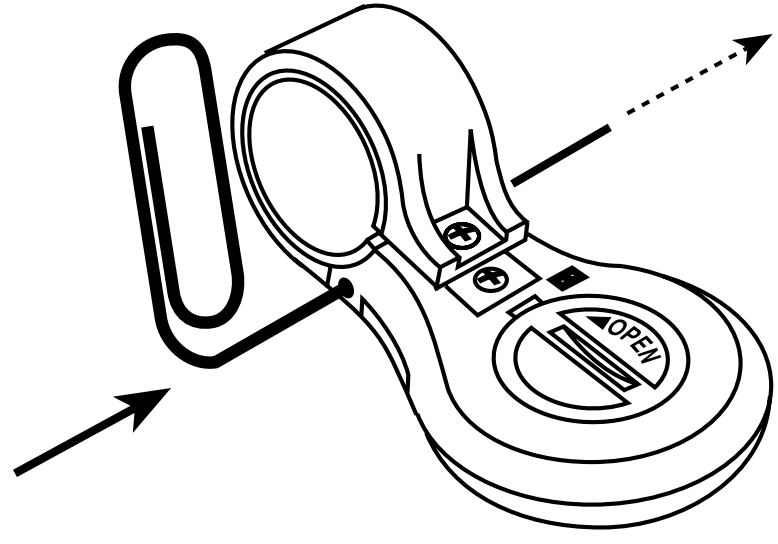


FIGURE 6. STRAP INSTALLATION

your Specialized dealer. To install the 31.8mm diameter strap onto your SpeedZone Comp, remove the two Philips head screws from the bottom of the computer and push out the retaining pin with a small screwdriver or a straightened paperclip. *(See figure 6)* Use caution not to lose the pin once you have removed it. Install the other mounting strap and reinsert the pin and screws. To test for proper installation of the magnet, transmitter and computer, activate the computer by pushing the 'MODE' (right side) button. Pick up the front of the bicycle and spin the front wheel. The "wheel option" indicator will flash. If it does not flash, check the sensor and magnet alignment. Realign as necessary until the "wheel option" indicator flashes while spinning the wheel.

OPERATION AND PROGRAMMING

When your SpeedZone Sport has not detected any speed input for 30 minutes, it will enter sleep-mode in order to conserve battery power. During sleep mode only the analog and digital clocks are displayed. The computer will wake up as soon as wheel speed is detected. Additionally, you can wake it up by pushing the "MODE" or "SET" button once. In order to operate your computer it must be placed in various "modes" (i.e. odometer mode, distance mode). The computer can be cycled through these

modes by pressing the "MODE" button located on the right-hand side of the housing. There are six cycling modes available: 1) Speed Mode, 2) Average Speed Mode, 3) Maximum Speed Mode, 4) Odometer Mode, 5) Trip Distance Mode and 6) Auto-timer Mode. Once you familiarize yourself with the mode selection operation you will find it very easy to navigate. The following flowchart outlines the mode/side-mode sequence.

Once a particular mode has been entered, its values can be reset or adjusted by pressing and holding the "SET " button for three seconds. Some operations may require that you use a combination of the "MODE" and "SET" buttons.

1. Setting the Display Language

Your SpeedZone Sport can display information on the dot-matrix display area in six different languages: English (ENGL), German (GER), French (FR), Italian (ITA), Dutch (NED), and Spanish (ESP). To select your language, depress hold the "MODE" and "SET" buttons simultaneously for three seconds. The selected language will be displayed. Use the "MODE" button to scroll through the languages. When the selected language is displayed (default language is English), press the "SET" button once to confirm your selection and exit display language mode.

2. Miles or Kilometers selection (English only)

Your SpeedZone Sport will record distance and speed in either miles (m & m/h) or kilometers (K & Km/h). Please note that miles can only be selected when the language setting is English. All other languages display only kilometers. (See "Setting the Display Language" above). To enter your selection of miles or kilometers, push the "MODE" button until ODO appears on the left side of the display (This is called the odometer mode). ***Note:*** if your display says TRIP, press the "SET" button once to change to ODO. Next, hold down the "SET" button for three seconds. The "Km" or "m" indicator will begin blinking. You may now alternate between miles and kilometers by pressing the "MODE" button. When the correct choice is flashing, select it by pressing the "SET" button. You will now enter the "Programmable Odometer" mode. If the odometer setting is correct push the "SET" button five times to exit odometer mode. (Otherwise, see "Setting the Programmable Odometer" below).

Note: The Speed Indication Bezel will indicate 0-45MPH on SpeedZone Sport computers purchased in the USA and the U.K. and 0-90 Km/h on computers purchased in all other countries. Cyclists in the USA and the U.K. who would like to display their speed and distance data in kilometers will have to multiply the value of the numbers on the face of the bezel by

two. For example, if the Speed needle is pointing to the 20 on the bezel, your actual speed is 40Km/h.

3. Setting the Programmable Odometer

This mode is useful if you have replaced the battery and would like to retain the mileage you have already ridden. To access the Programmable odometer mode, first advance to the Odometer Mode by pressing "MODE" button until ODO appears on the left-hand side of the screen. Note: if your display says TRIP, press the "SET" button once to change to ODO. Hold down the "SET" button for three seconds (If you have selected English language, the Km/h indicator will flash. If the Km/h setting is correct press the

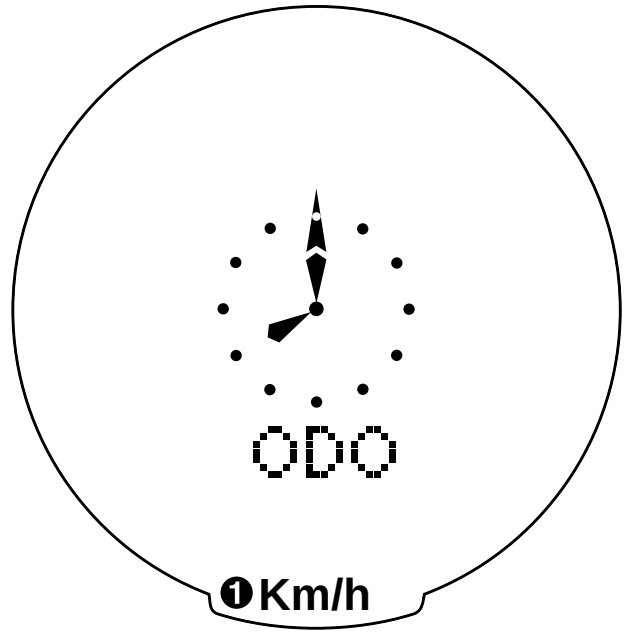


FIGURE 7. ODOMETER SCREEN

"SET" button once) and a five-digit number will appear. You are now in the programmable odometer mode. To enter a mileage into the odometer, press the "MODE" button until the flashing digit is correct. (***Note:*** The "MODE" button may be held to scroll to the correct digit.) Press the "SET" button to select the next digit to the

right. Repeat this process until all five digits are entered as your existing mileage. *(See figure 7)*

4. Wheel Circumference Selection
To set the circumference for the type of tires you are using, you can use Specialized's "Easy Calibration Mode" or measure your actual tire circumference by the rollout method. Two different tire diameters may be entered by using the computer's "Second Wheel Option."

Easy Calibration Mode
Your SpeedZone Sport has been preprogrammed with the following 14 Specialized tire sizes:

26 X 1.0	26 X 2.2
26 X 1.25	650c X 20
26 X 1.5	700c X 20
26 X 1.9	700c X 23
26 X 1.95	700c X 26
26 X 2.0	700c X 32
26 X 2.1	700c X 38

When using Easy Calibration Mode, the SpeedZone Sport will display the tire size on its LCD display screen. *(See figure 8)* The Easy Calibration Mode is accessed by entering the Speed (SPEED) mode and holding down the "SET" button for three seconds. The display will now show the

FIGURE 8. EASY CALIBRATION MODE

currently selected tire size for wheel option #1. To scroll through the pre-programmed tire sizes tap both the "MODE" and "SET" buttons simultaneously. When you reach the desired tire size press the "SET" button once to select it and enter Easy Calibration Mode for wheel option #2. Follow the same procedure to program the wheel #2 tire size and tap the "SET" button to exit Easy Calibration Mode.

Roll Out Method

The roll out method will provide the most accurate computer calibration and can take into account variables such as inflation pressure, rim width and rider weight.

1. Extend a tape measure out to 3000mm (120 inches) and lock it in place.
2. With your tire inflated to its proper pressure, place the valve at the 6:00 position (at the bottom) directly over the start of the measuring tape.
3. Roll the wheel one complete revolution until the valve stem is again at the 6:00 position. Read

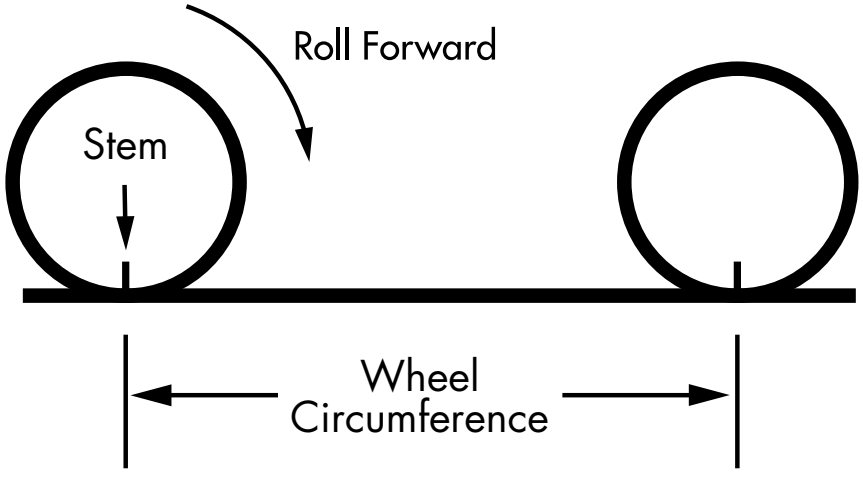


FIGURE 9. ROLL OUT ILLUSTRATION.

the tape directly under the valve and note the distance in millimeters. (To convert inches to millimeters, multiply inches by 25.4). Use this number to replace the default (default values are 2073 for wheel one, and 2134 for wheel two) when programming your computer. *(See figure 9).*

You may also use the following quick-reference chart:

Generic Tire Size Chart

This chart is for non-Specialized tires

26 X 1.75	2140
26 X 2.0	2074
26 X 2.1	2090
650C X 20	1945
700C X 26	2124
700C X 38	2170

Programming the circumference

To enter the tire circumference number, select the Speed (SPEED) mode and hold down the "SET" button for three seconds. The display will now show the currently selected tire size for wheel option #1. *(See figure 10).* If necessary scroll through the preprogrammed tire sizes by tapping both

the "MODE" and "SET" buttons simultaneously until the display shows MM and four-digit number. This number represents your tire circumference in millimeters. Press the "MODE" button until the flashing digit is correct. (***Note:*** The "MODE" button may be held to scroll to the correct digit.) Press the "SET" button to select the next digit to the right. Repeat the process until all four digits are entered as your tire circumference. Press the "SET" button once to select it and enter the circumference for wheel option #2. Follow the same procedure to program the wheel #2 tire size and tap the "SET" button to exit circumference programming mode *(See figure 10).*

FIGURE 10. CIRCUMFERENCE PROGRAMMING SCREEN

5. Setting the Clock

Your SpeedZone Sport features two clock displays, one analog and one digital. The hands of the analog clock will be set automatically to correspond to the digital one. To access the "clock mode" from any other mode, press and hold the

"MODE" button for three seconds. To set the clock, press the "SET" button for three seconds. The display will flash either twelve (12:) or twenty four (24:). Select between 12: or 24: mode by pressing the "MODE" button. Press the "SET" button to confirm your selection. The hour digit will now begin flashing. Press the "MODE" button to adjust the hour digits. AM/PM is selected by scrolling the hour digit. Press the "SET" button to accept the hour selection. The minutes will flash and can be adjusted by pressing the "MODE" button. (Hold the "MODE" button to scroll through the digits quickly) Press the "SET" button to set the minutes and return to clock mode *(See figure 11).*

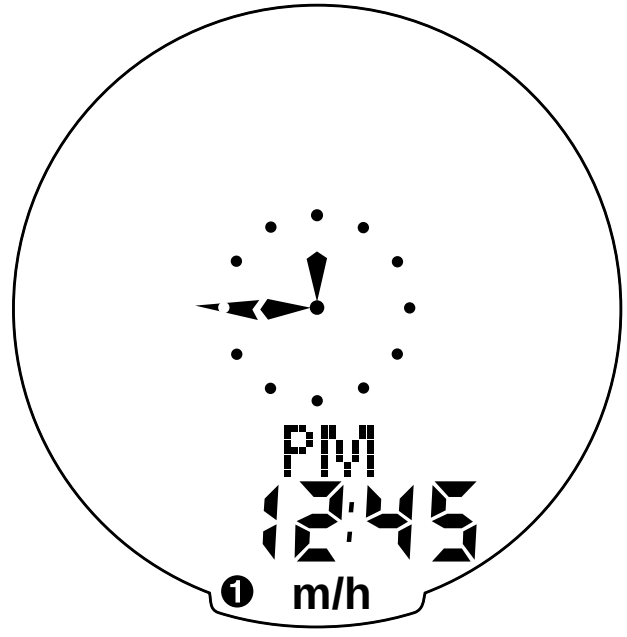


FIGURE 11. CLOCK MODE

Note: The minute hand of the analog clock has twelve segments and can only display time in five-minute increments. The hand will not jump to the next segment until the digital clock reaches whole five-minute intervals. (e.g. 12:05, 12:10, 12:15 etc.)

6. Automatic Start/Stop Timer (ATM)
The SpeedZone Sport has a ride-time feature called Automatic Timer Mode (ATM). The ATM selection allows you to keep track of your actual riding time. The timer only operates when the wheel is rotating and cannot be turned on or off manually.
Note: The average speed (AVSPD) calculation is based upon the ATM time.

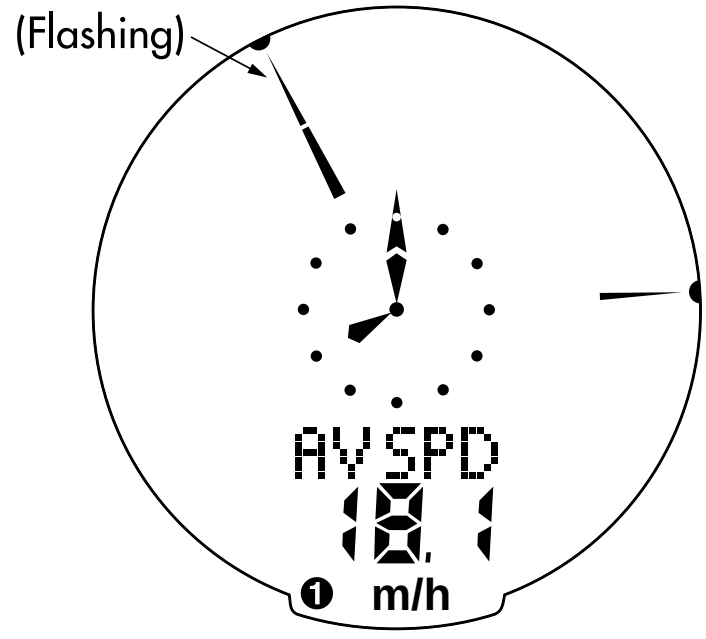


FIGURE 12. AVERAGE SPEED SCREEN

COMPUTER FUNCTIONS

Speedometer (SPEED)

Your current speed is always shown by the long needle on the LCD screen. Each needle represents one M/h when miles is selected and two Km/h when kilometers is selected. The speed is also shown on the Digital Display Area up to 99.9 M/h (99.9 Km/h) with a resolution of 0.1 M/h (0.1 Km/h)

Average Speed (AVSPD)

Average Speed is always shown by the flashing long needle on the LCD screen. The average speed is based upon the ATM time. The resolution of the average speed data on the Digital

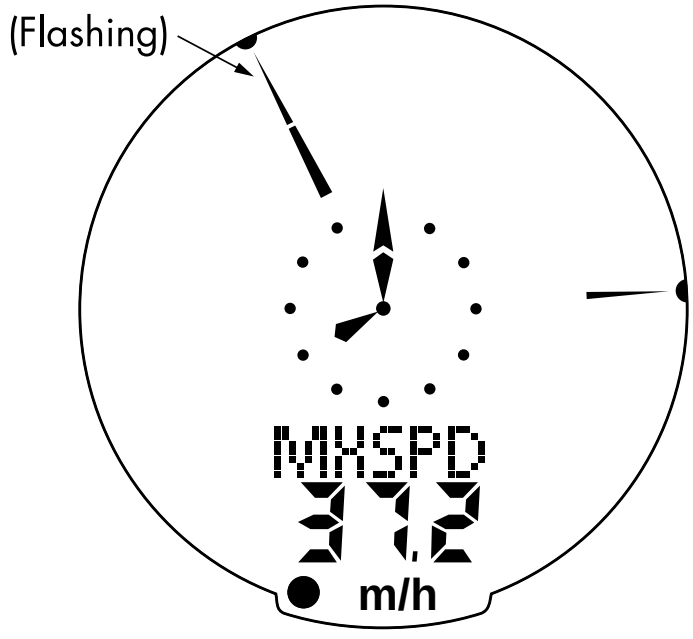


FIGURE 13. MAXIMUM SPEED SCREEN

Display Area is shown in 0.1M/h or Km/h increments. *(See figure 12)* The Average Speed is also shown on the Digital Display Area up to 99.9 M/h (99.9 Km/h) with a resolution of 0.1 M/h (0.1 Km/h)

Maximum Speed (MXSPD)
The maximum speed is shown by a short "Needle-Tip" that will usually be above the current speed needle (unless the current speed equals the Maximum Speed). The maximum speed is retained in memory and updated when a higher speed is maintained for three seconds. The maximum speed can be reset by pressing the "SET" button for three seconds. *(See figure 13)* The Maximum Speed is also shown on the Digital Display Area up to 99.9 M/h (99.9 Km/h) with a resolution of 0.1 M/h (0.1 Km/h)

Auto Start/Stop Timer (ATM)
In ATM mode the timer function records the actual time spent riding.

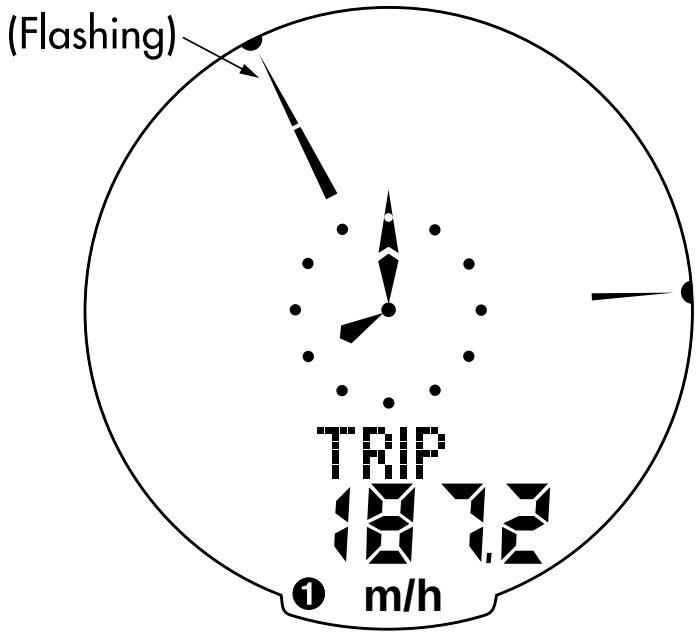


FIGURE 14. TRIP DISTANCE SCREEN

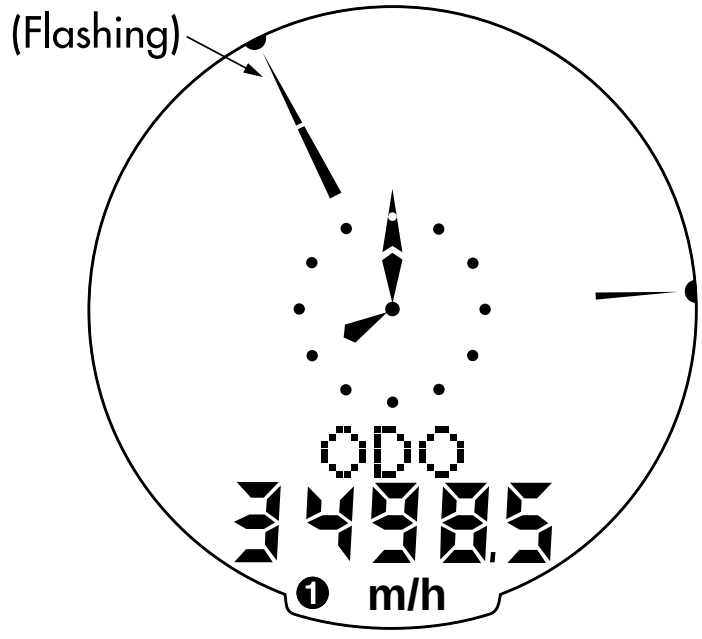


FIGURE 15. ODOMETER SCREEN

It operates only when there is speed input and is displayed In the Digital Display Area of the screen.

Trip Distance (TRIP)

Trip distance mode will record up to 999.99 miles or kilometers and then roll to zero. The trip distance SET can be reset by pressing the "SET" button for three seconds. The resolution is 0.01 miles (0.01 Kilometers). The trip distance is shown on the lower line if the screen. *(See figure14)*

Odometer (ODO)

The odometer will record the total distance traveled up to 99,999 miles or kilometers and then roll to zero.

The odometer can be reset by pressing the "SET" button for three seconds. The total distance is shown on the lower line if the screen. *(See figure 15)*

Programmable Odometer

The odometer digits are programmable. This is convenient for transferring your hard-earned mileage that is usually lost when changing batteries or computers.

Clock

Your SpeedZone Sport is equipped with a digital clock, which can be accessed from any other mode by pressing the "MODE" button for three seconds. The clock can be set to operate in either 12 or 24-hour mode.

TROUBLESHOOTING

- *Display is blank:*
  Change the battery or press the AC button on the bottom of the case
- *Display shows partial digits:*
  Press the AC button on the bottom of the case.
- *Speed/distance not recording:*
  Check sensor/magnet alignment. Make sure that the sensor is no more than 1/16" (2mm) from the magnet.
- *Entire screen is dark:*
  Did you leave the bike parked in the hot direct sun when it was parked? If so, move the bike to the shade. The data will be OK.
- *Computer moves on handlebar:*
  Tighten mount or add sizing straps to improve fit on handlebar.

IMPORTANT!

- Pay attention to traffic and road conditions at all times. Your first obligation is to be attentive and to ride safely.
- Keep your computer in good shape and use it safely.
- Do not expose it to direct sunlight except when you are riding.
- Do not disassemble your SpeedZone. There are no user serviceable parts inside.
- Make sure the magnet and the transmitter are well aligned. Check them regularly.
- Keep the computer and all of its components tightly attached, and check them regularly. If any of the components come loose, it could become tangled in your spokes and cause an accident.
- See your authorized Specialized dealer if you have any trouble installing or maintaining your computer.
- Clean the unit with a mild detergent and a soft dry cloth. Never use any kind of solvent or alcohol.
- The SpeedZone Sport computer is intended for use on bicycles only and should not be used on any motorized vehicle.

SPECIFICATIONS

Current Speed
0.0 to 99.9 MPH
0.0 to 99.9 Km/H

Average Speed (AVS)
0.0 to 199.9 MPH
0.0 to 199.9 Km/H

Maximum Speed (MXS)
0.0 to 199.9 MPH
0.0 to 199.9 Km/H

Trip Distance (TRIP)
0 to 999.99 miles or Km

Odometer (ODO)
0 to 99,999 miles or Km

Automatic Timer (ATM)
0 to 9hrs, 59min, 59sec. recycling type

Operating Temperature
40°F to 104°F (4°C to 40°C)

The following replacement parts are available from your Specialized dealer or by visiting the Specialized S-store at ***www.specialized.com***

Description / Part#

- Standard Wheel Magnet / 480-3003
- CR-2032 SpeedZone Battery / 480-3004
- Second mounting kit / 4812-4020
- Adhesive Backed Wheel Magnet / 4800-3002
- 31.8mm Handlebar Mount Kit / 4812-3100

ONE YEAR LIMITED WARRANTY

Specialized Bicycle Components Inc. warrants the Original Purchaser of this Specialized SpeedZone Sport cyclocomputer that the product is free from defects of material and workmanship under normal use and service for a period of one (1) year from the date of the original purchase. If within one (1) year from the date of that original purchase, this product is found to be defective in material or workmanship under normal use or service, Specialized Bicycle Components Inc. will, at its sole option, repair or replace the product without charge; provided that the Original Purchaser returns the product, securely packaged, postage prepaid to:

Specialized Bicycle Components Inc.
1137 South, 3800 West
Salt Lake City, UT 84104, USA
Attn: SpeedZone Sport Warranty

Be sure to include a letter indicating the specific reasons for returning the product and proof of date of purchase.

THIS WARRANTY DOES NOT APPLY TO, AND IS VOID AS TO, DEFECTS OR PHYSICAL DAMAGE RESULTING FROM ABUSE, NEGLECT, IMPROPER REPAIR, IMPROPER FIT, ALTERATIONS, MODIFICATIONS OR USE CONTRARY TO THAT INTENDED BY THE MANUFACTURER. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE IS LIMITED IN DURATION OF THIS LIMITED WARRANTY. SPECIALIZED BICYCLE SPORTONENTS, INC. SHALL NOT BE LIABLE FOR ANY ACCIDENTAL OR CONSEQUENTIAL DAMAGES

ARISING FROM ANY BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS PRODUCT. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND ALL OTHER REMEDIES, GUARANTIES OR LIABILITIES ARISING BY LAW OR OTHERWISE.

Note: This warranty does not pertain to batteries.

No person or representative is authorized to assume any liability on behalf of Specialized Bicycle Components, Inc. in connection with the sale of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SpeedZone is a registered trademark of Specialized Bicycle Components Inc.

© 2001 Specialized Bicycle Components Inc.
WWW.SPECIALIZED.COM